APPLICATION FOR FINANCIAL ASSISTANCE Revised 4/99

IMPORTANT: Please consult the "Instructions for Completing the Project Application" for assistance in completion of this form.

SUBDIVISION: City of W	yoming CODE#_061-86730	
DISTRICT NUMBER: 2	_ COUNTY: Hamilton DATE 09 / 10 / 07	
CONTACT: Terry Huxel	PHONE # (.513) 821 - 3505	
AND SELECTION PROCESS AND WHO CAN BES	THE INDIVIDUAL WHO WILL BE AVAILABLE ON A DAY-TO-DAY BASISDURING THE APPLICATION REVIEW TANSWER OR COORDINATE THE RESPONSE TO QUESTIONS) E-MAIL thuxel@wyoming.oh.us	
PROJECT NAME:	Waverly Avenue Improvements	
SUBDIVISION TYPE (Check Only 1)1. County _x_2. City3. Township4. Village5. Water/Sanitary District (Section 6119 O.R.C.) TOTAL PROJECT COST:\$.500,000	FUNDING TYPE REQUESTED (Check All Requested & Enter Amount) X 1. Grant \$250,000 Z. Loan \$ 3. Loan Assistance \$ FUNDING REQUESTED: \$250,000	
	•	-
	DISTRICT RECOMMENDATION be completed by the District Committee ONLY	
GRANT:\$ <u>250,000</u> SCIP LOAN: \$ RLP LOAN: \$	LOAN ASSISTANCE:\$ \(\sigma\) RATE:% TERM: vrs.	子語ので記
(Check Only 1) State Capital Improvement Program Local Transportation Improvements	Program	CING CI
	FOR OPWC USE ONLY	
PROJECT NUMBER: C/ Local Participation% OPWC Participation% Project Release Date:/_/ OPWC Approval:	Loan Interest Rate:	

1.0	PROJECT FINANCIAL INFORMATION	ON			
1.1	PROJECT ESTIMATED COSTS: (Round to Nearest Dollar)		TOTAL D	OLLARS	FORCE ACCOUNT DOLLARS
a.)	Basic Engineering Services:		\$	00	
	Preliminary Design \$. 00 . 00 . 00 . 00			
	Additional Engineering Services *Identify services and costs below.		\$.00	
b.)	Acquisition Expenses: Land and/or Right-of-Way		S	00	
c.)	Construction Costs:		\$ <u>500,000</u>	.00	
d.)	Equipment Purchased Directly:		\$.00	
e.)	Permits, Advertising, Legal: (Or Interest Costs for Loan Assistance Applications Only)		\$	00	
f.)	Construction Contingencies:		S	00	
g.)	TOTAL ESTIMATED COSTS:		\$_500,000	00	
*List A	Additional Engineering Services here: e:	Cost:			

		DOLLARS	%
a.)	Local In-Kind Contributions	\$	
b.)	Local Revenues	\$ <u>250,000</u> .00	50
c.)	Other Public Revenues ODOT Rural Development OEPA OWDA CDBG OTHER	\$	
	SUBTOTAL LOCAL RESOURCES:	\$_250,000 .00	<u>_50</u>
d.)	OPWC Funds 1. Grant 2. Loan 3. Loan Assistance	\$ <u>250,000</u> .00 \$00 \$00	50
	SUBTOTAL OPWC RESOURCES:	\$_250,00000	_50
e.)	TOTAL FINANCIAL RESOURCES:	\$_500,00000	<u> 100%</u>
1.3	AVAILABILITY OF LOCAL FUNDS:	:	
	Attach a statement signed by the <u>Chief</u> funds required for the project will be a Schedule section.	Financial Officer listed in se vailable on or before the ear	ction 5.2 certifying <u>all local shar</u> liest date listed in the Project
	ODOT PID# Sale I STATUS: (Check one) Traditional Local Planning Agency State Infrastructure B	y (LPA)	

1.2

PROJECT FINANCIAL RESOURCES:

(Round to Nearest Dollar and Percent)

2.1	DDA	JECT NAME: Waverly Avenue Reconstruction						
2.2	BRIEF PROJECT DESCRIPTION - (Sections A through C): A: SPECIFIC LOCATION: The project limits are the entire length of Waverly Avenue (Burns to Crescent). Please see attached project vicinity map							
	В:	PROJECT COMPONENTS: 1.) Full depth pavement removal and replacement 2.) Curb removal and replacement 3.) Replace/Add new storm catch basins 4.) Upgrade existing storm sewer 5.) Install new storm sewer system 6.) Seeding and Mulching as necessary 7.) Watermain Replacement 8.) New fire hydrants installed						
	C:	PHYSICAL DIMENSIONS / CHARACTERISTICS: The length of the proposed project is approximately 750 LF. The width of the existing roadway varies from 21 to 25 feet.						
	D:	DESIGN SERVICE CAPACITY: Detail current service capacity vs. proposed service level.						
	Road o	or Bridge: Current ADT _700 Year: Projected ADT: Year:						
	<u>Water/</u> ordina	Wastewater: Based on monthly usage of 7,756 gallons per household, attach current rate nce. Current Residential Rate: \$ Proposed Rate: \$						
	Stormy	vater: Number of households served:						
2.3	USEF	UL LIFE / COST ESTIMATE: Project Useful Life: 30 Years.						
	Attach project	Registered Professional Engineer's statement, with original seal and signature confirming the 's useful life indicated above and estimated cost.						
		4						

PROJECT INFORMATION
If project is multi-jurisdictional, information must be consolidated in this section.

2.0

3.0 REPAIR/REPLACEMENT or NEW/EXPANSION:

	TOTA	AL PORTION OF PROJECT REPAIR/RE	\$_500,000 <u>.00</u>					
	ТОТА	AL PORTION OF PROJECT NEW/EXPAI	PRTION OF PROJECT NEW/EXPANSION					
4.0	PRO							
			BEGIN DATE	END DATE				
	4.1	Engineering/Design:	<u>08 /15 /03</u>	04 /30/08				
	4.2	Bid Advertisement and Award:	_06/01/08_	07/01/08				
	4.3	Construction:	<u>07/16/08</u>	11/30/09				
	4.4	Right-of-Way/Land Acquisition:	N/A	_N/A				

5.0 APPLICANT INFORMATION:

5.1 CHIEF EXECUTIVE

OFFICER Robert Harrison TITLE City Manager 800 Oak Avenue STREET

CITY/ZIP Wyoming, Ohio 45215

PHONE 513-821-7600 FAX 513-821-7952

E-MAIL rharrison@wyoming.oh.us

5.2 CHIEF FINANCIAL

OFFICER Jenny Chavarria TITLE Director of Finance STREET 800 Oak Avenue

CITY/ZIP Wyoming, Ohio 45215

PHONE 513-821-7600 **FAX** 513-821-7952

E-MAIL

5.3 PROJECT MANAGER Terry Huxel

5.4 TITLE Director of Public Works

> STREET 800 Oak Avenue CITY/ZIP Wyoming, Ohio 45215

PHONE 513-821-7600 FAX 513-821-7952

E-MAIL

Changes in Project Officials must be submitted in writing from the CEO.

^{*} Failure to meet project schedule may result in termination of agreement for approved projects. Modification of dates must be requested in writing by the CEO of record and approved by the commission once the Project Agreement has been executed. The project schedule should be planned around receiving a Project Agreement on or about July 1st.

6.0 ATTACHMENTS/COMPLETENESS REVIEW:

Confirm in the blocks [] below that each item listed is attached.

- [X] A certified copy of the legislation by the governing body of the applicant authorizing a designated official to sign and submit this application and execute contracts. This individual should sign under 7.0, Applicant Certification, below.
- [X] A certification signed by the applicant's chief financial officer stating all local share funds required for the project will be available on or before the dates listed in the Project Schedule section. If the application involves a request for loan (RLP or SCIP), a certification signed by the CFO which identifies a specific revenue source for repaying the loan also must be attached. Both certifications can be accomplished in the same letter.
- [X] A registered professional engineer's detailed cost estimate and useful life statement, as required in 164-1-13, 164-1-14, and 164-1-16 of the Ohio Administrative Code. Estimates shall contain an engineer's original seal or stamp and signature.
- [NA] A cooperation agreement (if the project involves more than one subdivision or district) which identifies the fiscal and administrative responsibilities of each participant.
- [NA] Projects which include new and expansion components <u>and</u> potentially affect productive farmland should include a statement evaluating the potential impact. If there is a potential impact, the Governor's Executive Order 98-VII and the OPWC Farmland Preservation Review Advisory apply.
- [] Capital Improvements Report: (Required by O.R.C. Chapter 164.06 on standard form)
- [X] Supporting Documentation: Materials such as additional project description, photographs, economic impact (temporary and/or full time jobs likely to be created as a result of the project), accident reports, impact on school zones, and other information to assist your district committee in ranking your project. Be sure to include supplements which may be required by your *local* District Public Works Integrating Committee.

7.0 APPLICANT CERTIFICATION:

The undersigned certifies that: (1) he/she is legally authorized to request and accept financial assistance from the Ohio Public Works Commission; (2) to the best of his/her knowledge and belief, all representations that are part of this application are true and correct; (3) all official documents and commitments of the applicant that are part of this application have been duly authorized by the governing body of the applicant; and, (4) should the requested financial assistance be provided, that in the execution of this project, the applicant will comply with all assurances required by Ohio Law, including those involving Buy Ohio and prevailing wages.

Applicant certifies that physical construction on the project as defined in the application has NOT begun, and will not begin until a Project Agreement on this project has been executed with the Ohio Public Works Commission. Action to the contrary will result in termination of the agreement and withdrawal of Ohio Public Works Commission funding of the project.

Certifying Representative - Robert Harrison, City Manager

abe 4. Haur 9/20/2007

Signature/Date Signed

Engineer's Estimate

WAVERLY AVENUE IMPROVEMENTS

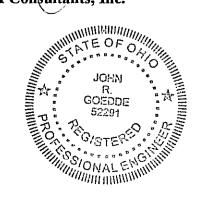
CITY OF WYOMING

DESCRIPTION	QUANTITY	UNIT	\$20.00E	PRICE	C	OST
Tree Removed/Clearing	1	LS	\$	15,000.00	\$	15,000.00
Excavation/Pavement Removed	1500	CY	\$	22.00	\$	33,000.00
Driveway Apron (remove & replace)	750	SY	\$	60.00	\$	45,000.00
Curb Removed	1700	LF	\$	5.00	\$	8,500.00
Catch Basins/Manholes Removed	2	EA	\$	500.00	\$	1,000.00
Concrete Walk (remove & replace)	500	SF	\$	6.00	\$	3,000.00
Pipe Removed	100	LF	\$\$	10.00	\$	1,000.00
Excavation, incl. Embankment (undercut)	300	CY	\$	40.00	\$	12,000.00
Aggregate Base	650	CY	\$	50.00	\$	32,500.00
Bituminous Aggregate Base	230	CY	\$	130.00	\$	29,900.00
Asphalt Concrete Surface Course	100	CY	\$	150.00	\$	15,000.00
12"-15" Conduit	450	LF	\$	90.00	\$	40,500.00
18"-24" Conduit	250	LF	\$	110.00	\$	27,500.00
Catch Basin	8	EA	\$	3,000.00	\$	24,000.00
Manhole	6	EA	\$	3,000.00	\$	18,000.00
Concrete Curb	1700	LF	\$	12.00	\$	20,400.00
Maintain Traffic	1	LS	\$	10,000.00	\$	10,000.00
Construction Layout Stakes	1	LS	\$	15,000.00	\$	15,000.00
Seed & Mulch Restoration	2000	SY	\$	1.00	\$	2,000.00
Utility/Waterline Adjustments, (including	1	LS	\$	100,000.00	\$	100,000.00
new fire hydrants)						
Contingencies	1	LS	\$	46,700.00	\$	46,700.00
TOTAL ESTIMATED COST	:				\$	500,000.00

I hereby certify this to be an accurate estimate of the proposed project. The useful life of this project

is 30 years.

John R. Goedde, P.E. JMA Consultants, Inc. フ*ーハーひ /* Date





CITY OF WYOMING • 800 OAK AVENUE • WYOMING, OHIO 45215 • (513) 821-7600

STATUS OF FUNDS CERTIFICATION

The City of Wyoming will utilize \$250,000 from its local budget for its participation in the Waverly Avenue Improvements Project.

Jennifer M. Chavarria Finance Director City of Wyoming

ranco: maps Chiomian, OH 45215

rage 1 of 2

Search:

Yahoo! My Yahoo! Mail

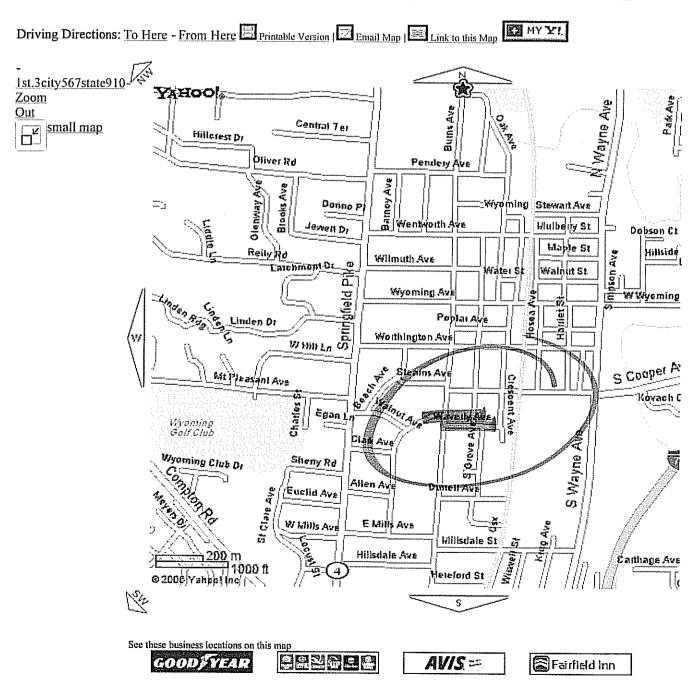
YAHOO! LOCAL

Sign In New User? Sign Up

IHEZ

We assumed that you meant Burns, instead of Burns.

* Map for: Burns Cincinnati, OH 45215 Save





CITY OF WYOMING • 800 OAK AVENUE • WYOMING, OHIO 45215 (513) 821-7600

FAX (513) 821-7952

September 1, 2006

Mr. John Goedde, P.E. JMA Consultants, Inc. 4357 Harrison Avenue Cincinnati, OH 45211

Re: 6" Waterlines on Waverly Avenue

Dear Mr. Goedde:

As you are aware, there are currently 6" waterlines on Waverly Avenue in the City of Wyoming.

This causes concern for our Fire Department, as 6" lines do not provide adequate pressure to fight fires effectively. Being able to provide the residents adequate fire protection is obviously extremely important.

It would be our recommendation that these 6" lines be replaced with 8" lines when the construction of this street is underway if possible.

Thank you for your consideration. Please do not hesitate to call me with any questions you may have.

Sincerely

Robert Rielage

Wyoming Fire Chief



CITY OF WYOMING • 800 OAK AVENUE • WYOMING, OHIO 45215 (513) 821-7600 FAX (513) 821-7952

September 6, 2006

Mr. John R. Goedde, Principal JMA Consultants, Inc. 4357 Harrison Avenue Cincinnati, OH 45211

Re:

Waverly Avenue

Dear John:

Pursuant to your letter regarding the lowering of the roadway for Waverly Avenue, I believe that there will be a conflict with the existing six-inch water line.

As with other similar projects, the existing water lines for Waverly Avenue are under the pavement. The proposed design of the roadway for this street will result in substandard cover for the existing water line. The water line will need to be lowered to have sufficient cover to accommodate the new street grades and proposed curb that you mentioned. Because of its age, lowering is not feasible. A new 8-inch main is required to be laid below the profile of the existing line if the project is funded.

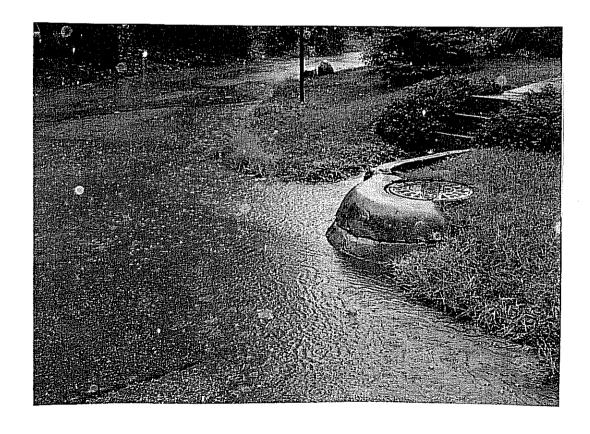
Sincerely,

Terry Huxel

Director of Public Works

Wavarly Avenue-City of Wyming





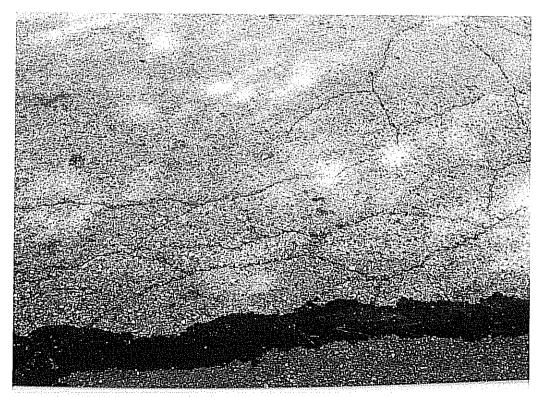
WAVERLY DE.





Warring Are.





Warang Are.



Waverly Ave.



Warry Are.

SUBMISSION CHECKLIST FOR

Warerly Are. #1

STATE OF OHIO CAPITAL IMPROVEMENT GRANT APPLICATIONS

This checklist must be submitted with the other items necessary for project eligibility and review. Upon district receipt of the full package, this checklist will be date stamped and a copy will be forwarded to the applying jurisdiction. Once the checklist has been stamped, the district will accept no additional information regarding the project.

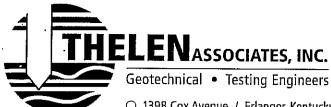
The following items <u>MUST</u> be submitted (by the deadline Committee and Support Staff to consider your application)	for such submission) in order for the District Two-Integrating complete and eligible for funding:						
OPWC Application for Additional Financial Assistance (State of Information OhioForm-Signed by C.E.O.) Two Form	on Form (District (Signed by P.E.)						
Useful Life Certificate Status of I (Signed by P.E.) (Jurisdiction Signed by C							
Project Pictures (Minimum of 4 - Mounted)							
The following items <u>MUST</u> be submitted with the applicat maximum points available for your application (Specify types)	tion in order for the District Two Support Staff to consider the pe of submission):						
· Infrastructure Condition Data · Geofenical Pages-	Infrastructure Safety Data • Leffer from Fire Chief • Leffer from Public Walson Director						
· Infrastructure Health Data	Jurisdiction User Fee/Assessment Data						
Economic Growth Data	Alleviate Traffic Hazards/LOS Data						
Ban/Moratorium Data	Users Certification Data						
The following items must be submitted by November 5, 2007:							
Canital Improvement Papart	Enabling Lagislation						

(On Jurisdiction Letterhead and Signed by Clerk)

LIMITED PAVEMENT EVALUATION WAVERLY AVENUE WYOMING, OHIO

Prepared for: City of Wyoming Thelen Project No.: 040969NEJ





○ 1398 Cox Avenue / Erlanger, Kentucky 41018-1002 / 859-746-9400 / Fax 859-746-9408
 ✓ 2140 Waycross Road / Cincinnati, Ohio 45240-2719 / 513-825-4350 / Fax 513-825-4756 www.thelenassoc.com

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City of Wyoming 800 Oak Avenue Wyoming, Ohio 45215

Attention: Mr. Terry Huxel

Re: Limited Pavement Evaluation

Waverly Avenue Wyoming, Ohio

Ladies and Gentlemen:

Submitted herewith are the results of pavement coring and subgrade sampling made along Waverly Avenue, Wyoming, Ohio. This work was requested and authorized by Ms. Jennifer Vatter, JMA Consultants, Inc., with approval from Mr. Terry Huxel, City of Wyoming, during a telephone conversation with our Mr. J. Dale Proffitt on August 25, 2004.

We are enclosing with this report a reprint of "Important Information About Your Geotechnical Engineering Report" published by ASFE, Professional Firms Practicing in the Geosciences, which our firm would like to introduce to you at this time.

We appreciate the opportunity to provide the geotechnical services for this project. Should you have any questions concerning the information, conclusions or recommendations contained in this report, please do not hesitate to contact us.

Respectfully submitted,
THELEN ASSOCIATES, INC.

Kevin D. Weaver, E.I. Materials/Staff Engineer

Arthur T. Sturbaum, P.E. Senior Geotechnical Engineer

KDW:ATS:jab 040969NEJ

Copies submitted:

2 - Client

STURBAUM

2 - JMA Consultants, Inc.

LIMITED PAVEMENT EVALUATION WAVERLY AVENUE WYOMING, OHIO

Prepared for: City of Wyoming Thelen Project No.: 040969NEJ





○ 1398 Cox Avenue / Erlanger, Kentucky 41018-1002 / 859-746-9400 / Fax 859-746-9408
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 www.thelenassoc.com

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City of Wyoming 800 Oak Avenue Wyoming, Ohio 45215

Attention: Mr. Terry Huxel

Re:

Limited Pavement Evaluation

Waverly Avenue Wyoming, Ohio

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Respectfully submitted,

THELEN ASSOCIATES, INC.

Keyn D. Weaver, E.I.

Materials/Staff Engineer

Arthur T. Sturbaum, P.E. Senior Geotechnical Engineer

KDW:ATS:jab 040969NEJ

Copies submitted:

2 - Client

2 - JMA Consultants, Inc.

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APPENDIX



○ 1398 Cox Avenue / Erlanger, Kentucky 41018-1002 / 859-746-9400 / Fax 859-746-9408
 ② 2140 Waycross Road / Cincinnati, Ohio 45240-2719 / 513-825-4350 / Fax 513-825-4756
 www.thelenassoc.com

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LIMITED PAVEMENT EVALUATION WAVERLY AVENUE WYOMING, OHIO

1.0 SCOPE

The enclosed pavement and subgrade evaluation was performed along Waverly Avenue from its intersection with Burns Avenue to its east end terminus, Wyoming, Ohio. The purpose of this evaluation was to assess the condition of the existing pavement and the subgrade soils, and to relate the engineering properties of the pavement constituents, that is existing pavement thickness and condition and subgrade strength, classification and compressibility characteristics to the serviceability of Waverly Avenue.

2.0 PROJECT CHARACTERISTICS

It is our understanding that the City of Wyoming is considering improvement of the existing pavement along Waverly Avenue. Improvement may involve additional overlaying of the current section or the complete removal and replacement of the pavement.

3.0 EXISTING SITE CONDITIONS

The area being considered for improvement is Waverly Avenue as it extends east from Burns Avenue approximately 900 feet to its east end terminus. The roadway ranges approximately from 21 to 25 feet wide and has an asphalt surface. Water, sanitary sewer, storm sewer and gas utilities are within and parallel the street within the right-of-

way. The roadway was constructed without curbing. The profile of the roadway is crowned from the centerline to the edge of pavement. Drainage paths are not clearly defined. Surface runoff is collected in catch basins located at intersections. A section of Waverly Avenue has been recently repaved. This section is located at the intersection of South Grove Avenue and extends for the width of South Grove Avenue. This new asphalt was placed during the reconditioning of South Grove Avenue.

The surface pavement consists of deteriorating asphalt with the majority of the cracking consisting of longitudinal cracks with intermittent but significant transverse cracking extending across the width of the roadway. Some patches are apparent throughout the length of roadway. These patches were likely performed to repair potholes or areas where the surface pavement had delaminated from the underlying asphalt courses. Some of the patches have also begun to deteriorate. The existing pavement surface appears to be beyond its service life, and in its current condition will rapidly deteriorate as the system of cracking becomes more pronounced and interconnected.

4.0 FIELD EXPLORATION

Two (2) pavement cores and test borings were drilled at the locations marked in the field by the Project Staff Engineer from Thelen Associates, Inc. The locations are referenced on each individual Log of Pavement Core and Test Boring by the nearest street address to their location or distance from a physical feature.

The cores were performed with a 4-inch diameter diamond-tipped core barrel. The test borings were extended into the underlying subgrade soils with the advancement of a 3-inch diameter Shelby tube (ASTM D1587) hydraulically pushed with a truck-mounted drill rig. Two (2) 2-inch O.D. split spoon samples were then obtained according to the procedures of ASTM D1586. The recovered cores and samples were marked in the field for proper identification. The split-spoon samples were placed in glass jars and

capped and the Shelby tubes were capped and taped in their tubes to preserve the samples at their natural moisture contents.

Concurrent with the drilling operation, the Drilling Technician prepared field test boring logs of the pavement and subsurface profile noting pavement types and depths, sampling intervals, standard penetration test resistances (N-values), soil stratifications and groundwater levels or the lack thereof.

5.0 LABORATORY REVIEW

Following completion of the test borings, the samples were returned to our Soil Mechanics Laboratory where they were reviewed and visually classified by the Project Engineer. Core samples of the asphalt pavement were visually reviewed and measured for length if they had not disintegrated during the coring process. Representative soil samples were selected for natural moisture content, unconfined compressive strength and Atterberg limits classification tests. A tabulation of the laboratory test results is included in the Appendix along with the associated test forms.

Based on the Drilling Technician's field logs, the results of the laboratory tests and the Engineer's visual classification of the samples, the final test boring logs were prepared. Copies of these logs are included in the Appendix along with a Soil Classification Sheet describing the terms and symbols used in their preparation. Unified Soil Classification System (USCS) and the Ohio Department of Transportation (ODOT) classifications, where determined by laboratory testing, are indicated on the test boring logs.

The dashed lines on the test boring logs identifying the changes between soil types were determined by interpolation between the samples and should be considered to be approximate. Only changes which occur within samples can be precisely determined

and are indicated by solid lines on the logs. The transition between soil types may be abrupt or gradual.

6.0 SUBSURFACE PROFILE

The cores and test borings were located in areas which generally represent the deteriorated pavement conditions. Asphalt depths encountered were 4. 0 inches in Test Boring 1 and 8¾ inches in Test Boring 2. The cores consisting of two apparent courses in Test Boring 1 and five apparent courses in Test Boring 2. Core 2 separated between courses at a depth of 5 inches below the surface during coring.

A granular base was encountered below the asphalt pavement and consisted of very moist to wet dense to very dense fine to coarse sand and/or gravel. The granular base in Test Borings 1 and 2 was measured at 7 inches and 10¼ inches, respectively.

Underlying the granular base in Test Boring 2, a clay fill was encountered. The fill consisted of stiff clay, trace fine to coarse sand and asphalt fragments. The fill was encountered to a depth of 36.0 inches. The clay fill was found to have an Atterberg liquid limit of 52 percent and a plasticity index of 30. This classifies the fill soil as a fat clay, CH (USCS) and A-7-6 (ODOT). The clay fill was found to have a natural dry density of 94.7 pounds per cubic foot (pcf) with an unconfined compressive strength of 1,700 pounds per square foot (psf). The natural moisture content of the fill was 26.0 percent.

In Test Boring 1 from 11.0 inches to 70.8 inches, the bottom of test boring, and in Test Boring 2 from 36.0 inches to 79.2 inches, the bottom of test boring, native silty clay and clay was encountered. Native soils are stiff to very stiff in consistency near the subgrade surface. In Test Borings 1 and 2 from 48.0 inches to 60.0 inches and 36.0 inches to 60.0 inches, respectively, very soft to medium stiff silty clay and sandy clay was encountered.

The native silty clay encountered directly beneath the granular base in Test Boring 1 was found to have an Atterberg liquid limit of 39 percent and a plasticity index of 20. This classifies this native soil as lean clays, CL (USCS) and A-6b (ODOT). The native soil subgrade was found to have a natural dry density of 99.4 pcf with an unconfined compression strength of 2,319 psf. The natural moisture content of the native soils ranged from 17.0 percent to 28.5 percent, averaging 24.4 percent.

Groundwater was encountered during drilling at 5.0 feet and 3.6 feet in Test Borings 1 and 2, respectively. At the completion of drilling, groundwater levels were recorded in Test Boring 2 at 4.3 feet. Both test borings were immediately backfilled.

7.0 CONCLUSIONS AND RECOMMENDATIONS

7.1 General

Based upon our engineering reconnaissance of the site, the pavement cores and underlying soil borings, a visual examination of the samples, the laboratory tests, our understanding of the proposed remediation, and our experience as Consulting Soil and Construction Engineers in the Greater Cincinnati Area, we have reached the following conclusions and make the following recommendations.

The conclusions and recommendations of this report have been derived by relating the general principles of the discipline of Geotechnical Engineering to the proposed construction outlined by the Project Characteristics section of this report. Because changes in surface, subsurface, climatic and economic conditions can occur with time and location, we recommend for our mutual interest that the use of this report be restricted to this specific project.

Our understanding of the proposed remediation is based on the telephone conversation with Ms. Vatter at the time this work was authorized. We recommend

that our office be retained to review the final design documents, plans and specifications, to assess any impact changes, additions or revisions in these documents may have on the conclusions and recommendations of this geotechnical report. Any changes or modifications which are made in the field during the construction phase which subgrade preparation, utility locations or other related site work should also be reviewed by our office prior to their implementation.

If conditions are encountered in the field during pavement remediation which vary from the facts of this report, we recommend that our office be contacted immediately to review the changed conditions in the field and make appropriate recommendations.

The scope of our services did not include any environmental assessment or investigation for the presence or absence of wetlands or hazardous or toxic materials in the soil, bedrock, surface water, groundwater or air, on or below or around this site.

We have performed the test borings and laboratory tests for our evaluation of the existing roadway conditions and for the formulation of the conclusions and recommendations of this report. We assume no responsibility for the interpretation or extrapolation of the data by others.

The subgrade preparation recommendations of this report presume that the earthwork will be monitored continuously by an Engineering Technician under the direction of a Registered Professional Geotechnical Engineer. We recommend that the Owner contract these services directly with Thelen Associates, Inc.

The existing pavement section consists of asphaltic concrete which was encountered in thickness varying from 4 inches to 8¾ inches. The asphalt cores have 2 to 5 apparent courses with Core 2 separating between the courses at 5 inches below the surface during coring. The surface conditions are deteriorating due to the increasing

severity of the surface cracking and the lack of defined drainage paths to the catch basins.

The granular fill underlying the asphalt pavement was very moist to wet which indicates that the surface cracking is allowing the storm water to drain through the asphalt pavement or along the pavement edge to the underlying granular base. The granular base does not appear to be well-drained, allowing both the granular base and the immediate soil subgrade beneath the base to become saturated.

Because of the surface condition of the street discussed in the Existing Site Conditions, Section 3.0 of this report, the variability of the pavement, the permeability of the existing surface thickness, as well as the deterioration of the existing asphalt pavement, it is our opinion that proper reconditioning of the existing street will require the complete removal of the existing pavement, reconditioning and drying of the underlying granular base, reconditioning of the soil subgrade and the replacement of the pavement section. In conjunction with replacement, the subgrade should be graded such that the surface drainage is directed off the asphalt roadway to curbing, and then along the curbing to storm sewer inlets.

Due to the very soft to medium stiff soils encountered beneath 48.0 inches in Test Boring 1 and 36.0 inches in Test Boring 2, every effort should be taken to avoid undercutting to within 2.0 to 2.5 feet above these soils. Compounding these low-density soil issues, groundwater was encountered in both borings within these layers. If proofrolls indicate that the design soil subgrade requires deep undercutting, our office should be contacted to evaluate the site conditions and provide appropriate options.

7.2 Soil Subgrade Preparation

Following the removal of the asphalt pavement surface and any granular base materials, the exposed subgrades should be regraded as required to redirect the surface drainage. The subgrade should then be proofrolled with a piece of heavy equipment in the presence of the Project Geotechnical Engineer or a representative thereof. Any yielding areas noted during the proofroll should be undercut to stiff soils or as recommended by the Engineer.

Deep undercuts will encounter soft and saturated soils and groundwater. All attempts should be made to preserve the existing stiff soil crust which comprises the pavement subgrade. Light, wide-tracked equipment should be used to prepare the subgrade.

The base of all shallow undercuts should be proofrolled. Should additional yielding be noted, the Engineer should be consulted to assess whether further undercutting or additional measures should be implemented. An accepted proofrolled surface should then be compacted in place to a minimum dry density of 95 percent of the maximum dry density as determined by the standard Proctor moisture-density test, ASTM D698.

In some instances, we have found that shallow utilities prevent or limit undercut depths. In addition, the soft soils which lie beneath the stiff soil crust are particularly susceptible to disturbance during undercutting. In these cases, areas which fail a proofroll may have to be improved using additional granular soils and the integration of geogrids, or by the complete redesign of pavement sections. We recommend that, if shallow utilities exist in the areas of poor subgrade, the Design Engineer and/or the Geotechnical Engineer be consulted.

New fill for restoration of subgrades should consist of approved soil from the undercuts or approved borrow with a liquid limit less than 60 percent and a plasticity index less than 35 percent. This fill should be placed in shallow, level layers, 6 to 8 inches in

thickness, and should be compacted with appropriate equipment, such as a sheepsfoot roller or self-propelled compactor for clayey soils. If granular fill is used, it should be permanently drained and compacted with vibratory equipment.

All fill should be placed at a moisture content between 2 percent below and 3 percent above the optimum moisture content, ASTM D698. The laboratory tests indicate that the natural moisture contents of many of the subgrade materials are likely within a range consistent with the optimum moisture for compaction or slightly above, such that significant moisture conditioning may not be necessary during construction, depending on the season of the year, the construction procedures implemented and weather conditions.

Immediately prior to placing the pavement section, including the placement of any granular base course, the soil subgrade should be proofrolled and any yielding areas should be undercut and replaced with compacted fill as outlined above. The subgrade surface should then be manipulated as needed to bring the moisture content to within 2 percent of the optimum moisture content. The prepared subgrade should then be compacted in place to at least 100 percent, ASTM D698.

The criteria presented above for subgrade remediation are, in our opinion, the minimum acceptable levels for satisfactory performance of the project. Local regulations may necessitate specifications which are more stringent than those presented in this report.

7.3 Pavement Design

We recommend that the pavements for the project be designed in accordance with the anticipated axle loads, frequency of loading and the properties of the subgrade soils. The subgrade properties for use in formal pavement designs should be determined from field California Bearing Ratio (CBR) or plate load tests or from a correlation

between field density tests and laboratory CBR tests. In lieu of these formal test, the Design Engineer for the pavement may elect or assume a CBR value based on index properties for the soils, applying laboratory testing data provided herein. It should be noted that the materials encountered at subgrade are generally silty clay soils which are relatively weak and typically have relatively low CBR values. Any assumed CBR value should be confirmed by field or laboratory testing prior to pavement replacement.

If a granular base is to be reincorporated beneath the pavement, we recommend that the base be permanently drained to discharge at the edge of the pavement or via underdrains into the storm sewer system.

KDW:ATS:jab 040969NEJ

APPENDIX

ASFE Report Information

Tabulation of Laboratory Tests

Unconfined Compression Test Forms

Pavement Core and Test Boring Logs

Soil Classification Sheet

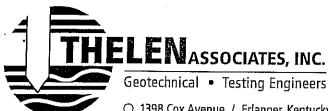


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LIMITED PAVEMENT EVALUATION CITY OF WYOMING WAVERLY AVENUE WYOMING, OHIO 040969NEJ

TABULATION OF LABORATORY TESTS

	USCS/ODOT	Classification	Olacoli Call	CL/A-6b				CH/A-7-6					
11,000,000	Compression	Strenath, psf	0 50 0	2,013				1,700					
	Natural Dry	Density, pcf	7 66				17.0	94.7					
its. %	Ī	ī	ද				S	3					
Atterbera Limits. %	2 2	뷥	-				cc	3					
Atterb	-	4	33				52	3					
	Moisture	Colliciil, /0	27.0	22.0	23.9	17.0	26.0	27.7	28.5				
i.	<u>_</u>		18.0	48.0	60.0	70.8	26.0	60.0	79.2				-
Depth, in.	From		2.	30.0	48.0	90.0	19.0	36.0	60.0				
	Sample Number	DT 2	7-1 -	က	4A	4B	PT-2	ო	4				7
	Boring	+	- 1				2						



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UNCONFINED COMPRESSIVE STRENGTH OF COHESIVE SOIL. ASTM - D2166 UNIT WEIGHT AND NATURAL MOISTURE

CLIENT:

City of Wyoming

PROJECT: LOCATION: **Limited Pavement Evaluation** Waverly Avenue, Wyoming, Ohio

PROJECT NUMBER:

040969NEJ

LAB NUMBER:

1347N

BORING NUMBER:

SAMPLE NUMBER:

11.0

19.0

SAMPLE DESCRIPTION:

Gray and brown moist stiff SILTY CLAY

DEPTH (IN.):

SAMPLE OBTAINED BY:

SHELBY TUBE

CONDITION: UNTRIMMED

DATE:

09/07/04

NATURAL UNIT WEIGHT

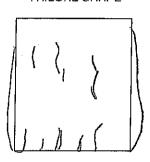
1

with iron oxide stains

FAILURE SHAPE

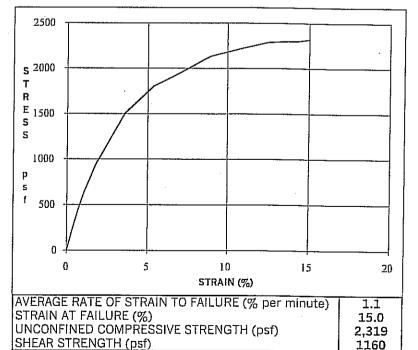
WATER CONTENT AFTER SHEAR

AVERAGE DIAMETER (in.)	2.83
HEIGHT (in.)	5.60
HEIGHT TO DIAMETER RATIO	1.98
AVERAGE AREA (sq. ft.)	0.0436
VOLUME (cu. ft.)	0.0203
WET WEIGHT (lbs.)	2.57
DRY WEIGHT (lbs.)	2.02
DRY DENSITY (pcf)	99.4

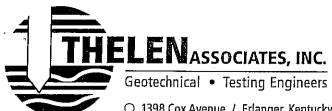


CAN NUMBER	
	oh-10
WET WEIGHT + CAN (lbs.)	2.17
DRY WEIGHT + CAN (lbs.)	1.81
WEIGHT WATER (lbs.)	0.36
WEIGHT CAN (lbs.)	0.49
WEIGHT SOLID (Ibs.)	1.33
MOISTURE (%)	27.0
LOAD CELL NUMBER	CELL

DEFORM	LOAD	LOAD	STRAIN	CORR.	STRESS
DÌAL	CELL			AREA	
.001 IN.		LBS.	%	SQ. FT.	PSF
0	0	0	0	0.0436	0
20	10.0	10.0	0.4	0.0438	229
40	20.0	20.0	0.7	0.0439	455
60	28.0	28.0	1.1	0.0441	635
80	35.0	35.0	1.4	0.0442	791
100	42.0	42.0	1.8	0.0444	946
200	68.0	68.0	3.6	0.0452	1504
300	83.0	83.0	5.4	0.0461	1801
400	92.0	92.0	7.1	0.0470	1959
500	102.0	102.0	8.9	0.0479	2130
600	108.0	108.0	10.7	0.0488	2211
700 ·	114.0	114.0	12.5	0.0498	2287
760	116.0	116.0	13.6	0.0505	2299
800	117.0	117.0	14.3	0.0509	2300
840	119.0	119.0	15.0	0.0513	2319



REMARKS: Unconfined compressive strength controlled by 15% strain prior to sample failure.



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UNCONFINED COMPRESSIVE STRENGTH OF COHESIVE SOIL, ASTM - D2166 UNIT WEIGHT AND NATURAL MOISTURE

CLIENT:

City of Wyoming

PROJECT: LOCATION: Limited Pavement Evaluation Waverly Avenue, Wyoming, Ohio

PROJECT NUMBER:

2

040969NEJ

LAB NUMBER:

19.0

1351N

BORING NUMBER:

SAMPLE NUMBER:

DEPTH (IN.):

26.0

SAMPLE DESCRIPTION:

Mixed olive brown and brown, trace gray moist medium

stiff FILL, clay, trace fine to coarse sand and asphalt fragments

SAMPLE OBTAINED BY:

SHELBY TUBE

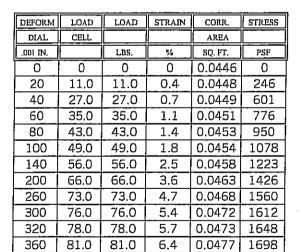
CONDITION: UNTRIMMED

DATE:

09/07/04

NATURAL UNIT-WEIGHT

AVERAGE DIAMETER (in.)	2.86
HEIGHT (in.)	5.5 9
HEIGHT TO DIAMETER RATIO	1.95
AVERAGE AREA (sq. ft.)	0.0446
VOLUME (cu. ft.)	0.0208
WET WEIGHT (lbs.)	2.48
DRY WEIGHT (lbs.)	1.97
DRY DENSITY (pcf)	94.7



7.5

8.8

9.3

0.0483

0.0489

0.0492

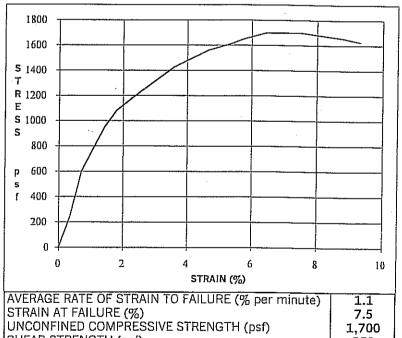
1699

1656

1626

FAILURE SHAPE

WATER CONTENT AFTER SHEAR



SHEAR STRENGTH (psf) 850

REMARKS:

420

490

520

82,0

81.0

80,0

82.0

81.0

80.0

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U - UNDISTURBED

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LOG OF PAVEMENT CORE AND CLIENT: City of Wyoming	TES	ST B	ORI			4	
PROJECT: Limited Pavement Evaluation, Waverly Avenue, Wyoming,	Ohio			BORING			69NE
LOCATION OF BORING: Waverly Avenue approximately 100 feet east of Burns		8		UUE	#	100	OSIAL
SUBSURFACE MATERIAL DESCRIPTION COLOR, MOISTURE, DENSITY, PLASTICITY, SIZE, PROPORTIONS	STRATA DEPTI (In.)	DEPTH SCALE (ft.)	1				
SURFACE —	10.0-	\	Cond	Blows/6"	No	. Турс	Rec. (in.)
ASPHALT (2 apparent courses, intact)	4.0_	↓ =			14	PC	4 5
GRANULAR BASE, mixed brown very moist to wet dense fine to coarse sand and gravel (7")	11.0	│ ,	D			CA	5
Gray and brown moist stiff SILTY CLAY with iron oxidestains_(CL/A—6b)	30.0	2 —	U		2	PT	10 /24
		3 -					
Mottled brown moist medium stiff to stiff sandy SILTY CLAY with iron oxide stains.	48.0	4 —	1	2/3/5	3	DS	14
Brown very moist very soft sandy CLAY.	60.0						
Brown, some gray moist very stiff SILTY CLAY, trace fine to medium sand and limestone floaters with iron oxide stains.	70.8	5	1	4/3/4	4A 4B	DS	18
Bottom of test boring at 70.8 inches.		6					
		8					
		9 -					
Datum Hammer Wt140 lb Hole Diameter	5	»	_ For	reman <u>GB</u>			
turf. Elev Hammer Drop <u>30 in.</u> Pvmt. Core Dia.	4	n	_ Eng	gineer <u>KD</u> V	γ		
ate Started 9-2-04 Pipe Size 2 in. O.D. Boring Method	C	FA .	_ Dat	te Completed	9	-2-0)4
- INTACT PT - PRESSED SHELBY TUBE AT COMPLETION D - UNDISTURBED CA - CONTINUOUS FLIGHT AUGER AFTER hrs.	.0 ry	TH ft. ft. ft. hrs.	CCB- CFA- DC -	BORING METH - CONCRETE CO - CONTINUOUS - DRIVING CASII - HAND AUGER	RE B	ARRE IT AU	L GERS

* STANDARD PENETRATION TEST - DRIVING 2" O.D. SAMPLER 1' WITH 140# HAMMER FALLING 30"; COUNT MADE AT 6" INTERVALS

DC — DRIVING CASING HA — HAND AUGER

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CLIENT: City of Wyomin						LIN G	G#	2	
	ment Evaluation, Waverly Av	enue, Wyoming,	Ohio			JOI			
LOCATION OF BORING: In fro	ont of 333 Waverly Avenue			,					
COLOR, MOISTUR	SUBSURFACE MATERIAL DESCRI E, DENSITY, PLASTICITY, SIZE, P	PTION ROPORTIONS	DEPTH	DEPTH SCALE (ft.)	ļ	SAMP	LE		
	SURFACE		1 0.0 -	(11.)	Cond	Blows/6"	No.	Туре	Rec (in.
ASPHALT (5 appo surface between	arent courses, separated at 5" belo courses during coring).	ow	8.75				1A	PC	
GRANULAR BASE, coarse gravel, litt	mixed gray very moist very dense tle clayey silt and slag (104").	fine to	19.0	1 -	D	·	1B	CA	104
Mixed olive brown clay, trace fine to (CH/A—7—6).	and brown, trace gray moist stiff coarse sand and asphalt fragme — — — — — — — —	FILL, nts - — — — ———	36.0	3 -	U		2	PT	13%7/24"
Mottled brown and CLAY, trace beddi	d gray moist soft to medium stiff s ng planes.	SILTY	60,0	5		4/5/2	3	DS	8
Mottled grayish br CLAY.	own moist stiff to very stiff lean S	ILTY	79,2	6	1	3/4/6	4	DS	16
Bottom of test b	poring at 79.2 inches.			8					
Datum	Hammer Wt140 lb	Hole Diameter				emanGB			
	Hammer Drop 30 in.				-	ineer <u>KD</u>			
	Pipe Size 2 in. O.D.	Boring Method	CF	·A	_ Dat	e Completed	9-	-2-0	14
SAMPLE CONDITIONS D - DISINTEGRATED DS	SAMPLE TYPE — DRIVEN SPLIT SPOON	GROUND WATER FIRST NOTED 3.				BORING METE - CONCRETE C		ARRE	ı

S_{ℓ}

- INTACT

U - UNDISTURBED L - LOST

PT — PRESSED SHELBY TUBE
CA — CONTINUOUS FLIGHT AUGER
PC — PAVEMENT CORE

AT COMPLETION 4.3 AFTER_ BACKFILLED_ hrs._____ft. _lmmed.__hrs. _hrs.__

CFA— CONTINUOUS FLIGHT AUGERS DC — DRIVING CASING HA — HAND AUGER

* STANDARD PENETRATION TEST - DRIVING 2" O.D. SAMPLER 1' WITH 140# HAMMER FALLING 30"; COUNT MADE AT 6" INTERVALS



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SOIL CLASSIFICATION SHEET

NON COHESIVE SOILS (Silt, Sand, Gravel and Combinations)

<u>Density</u>	•	<u>Particle Siz</u>	ze Identificati	ion
Very Loose	- 5 blows/ft. or less	Boulders	- 8 inch di	ameter or more
Loose	 6 to 10 blows/ft. 	Cobbles		ch diameter
Medium Dense	- 11 to 30 blows/ft.	Gravel	- Coarse	- 3/4 to 3 inches
Dense	- 31 to 50 blows/ft.	•	- Fine	- 3/16 to 3/4 inches
Very Dense	- 51 blows/ft. or more			
•		Sand	- Coarse	- 2mm to 5mm (dia. of pencil lead)
Relative Properti	<u>ies</u>		- Medium	- 0.45mm to 2mm
Descriptive Tern	1 Percent			(dia. of broom straw)
Trace	1 – 10		- Fine	- 0.075mm to 0.45mm
Little	11 – 20			(dia. of human hair)
Some	21 – 35	Silt		- 0.005mm to 0.075mm
And	36 – 50			(Cannot see particles)

COHESIVE SOILS (Clay, Silt and Combinations)

		Uncontined Compressive
Consistency	<u>Field Identification</u>	Strength (tons/sq. ft.)
Very Soft	Easily penetrated several inches by fist	Less than 0.25
Soft	Easily penetrated several inches by thumb	0.25 - 0.5
Medium Stiff	Can be penetrated several inches by thumb with moderate effort	0.5 - 1.0
Stiff	Readily indented by thumb but penetrated only with great effort	1.0 - 2.0
Very Stiff	Readily indented by thumbnail	2.0 - 4.0
Hard	Indented with difficulty by thumbnail	Over 4.0

Classification on logs are made by visual inspection.

Standard Penetration Test - Driving a 2.0" O.D., 1 3/8" I.D., sampler a distance of 1.0 foot into undisturbed soil with a 140 pound hammer free falling a distance of 30 inches. It is customary to drive the spoon 6 inches to seat into undisturbed soil, then perform the test. The number of hammer blows for seating the spoon and making the tests are recorded for each 6 inches of penetration on the drill log (Example - 6/8/9). The standard penetration test results can be obtained by adding the last two figures (i.e. 8+9=17 blows/ft.). Refusal is defined as greater than 50 blows for 6 inches or less penetration.

Strata Changes - In the column "Soil Descriptions" on the drill log, the horizontal lines represent strata changes. A change.

Groundwater observations were made at the times indicated. Porosity of soil strata, weather conditions, site topography, etc., may cause changes in the water levels indicated on the logs.

ADDITIONAL SUPPORT INFORMATION

For Program Year 2008 (July 1, 2008 through June 30, 2009), jurisdictions shall provide the following support information to help determine which projects will be funded. Information on this form must be accurate, and where called for, based on sound engineering principles. Documentation to substantiate the individual items, as noted, is required. The applicant should also use the rating system and its' addendum as a guide. The examples listed in this addendum are not a complete list, but only a small sampling of situations that may be relevant to a given project.

IF YOU ARE APPLYING FOR A GRANT, WILL YOU BE WILLING TO ACCEPT A LOAN IF ASKED BY THE DISTRICT? _____YES __X_NO (ANSWER REQUIRED)

Note: Answering "Yes" will not increase your score and answering "NO" will not decrease your score.

1) What is the physical condition of the existing infrastructure that is to be replaced or repaired?

Give a statement of the nature of the deficient conditions of the present facility exclusive of capacity, serviceability, health and/or safety issues. If known, give the approximate age of the infrastructure to be replaced, repaired, or expanded. Use documentation (if possible) to support your statement. Documentation may include (but is not limited to): ODOT BR86 reports, pavement management condition reports, televised underground system reports, age inventory reports, maintenance records, etc., and will only be considered if included in the original application. Examples of deficiencies include: structural condition; substandard design elements such as widths, grades, curves, sight distances, drainage structures, etc.

The payement and subgrade were evaluated and an engineering report was prepared (included with application - please reference tabbed and highlighted sections). The payement is deteriorating with severe longitudinal and transverse cracking across the roadway. Asphalt patches indicate areas of pothole repair as well as repair of surface payement due to delamination from the underlying asphalt courses. The patches are beginning to deteriorate. Existing curb has deteriorated along the surface and is visible only in small sections. In conjunction, the payement section is not a consistent crown and therefore the drainage is not well controlled in the gutter. The failed condition of the typical surface drainage system (i.e. crowned pavement and curbs to control runoff) causes ponding of surface runoff (see pictures) and therefore does not properly perform its intended function to channel surface water to a storm sewer system. The existing storm sewer system is inadequate. There is an insufficient number of catch basins to properly collect runoff. The new storm sewer will be designed to current standards. The installation of the new crowned payement and the new curbs together with adding catch basins and upgrading the storm sewer system will alleviate the surface ponding and potential for structural flooding. These improvements will also prevent surface water from draining to the new gravel base extending the life of the pavement section. The pavement section will be lowered to facilitate positive drainage to the new curb. This will result in inadequate cover over the existing waterline, which will then need to be replaced with the project (see attached letter).

2) How important is the project to the safety of the Public and the citizens of the District and/or service area?

Give a statement of the projects effect on the safety of the service area. The design of the project is intended to reduce existing accident rate, promote safer conditions, and reduce the danger of risk, liability or injury. (Typical examples may include the effects of the completed project on accident rates, emergency response time, fire protection, and highway capacity.) Please be specific and provide documentation if necessary to substantiate the data. The applicant must demonstrate the type of problems that exist, the frequency and severity of the problems and the method of correction.

In conjunction with and necessitated by the roadway improvements on Waverly Avenue, (lowering the street), the existing 6-inch watermain along Waverly will be replaced with an 8-inch main. Also, additional fire hydrants will be installed. This will increase the capacity of the water system allowing better service and fire protection capabilities (see attached letter from Fire Chief). Waverly Avenue is utilized by the residents on the street and adjacent streets as well as other city residents to connect to Grove (Foster Memorial) Park. The rough and cracking surface increases the potential for accidents and injuries to motorists. The new pavement will alleviate those conditions, providing a smooth driving surface and a safer facility. Currently, surface runoff ponds on the street, causing icing in the winter. The storm sewer will be upgraded to current standards (including adding catch basins), curbs will be installed and the street will be graded to eliminate ponding of water (ref. pictures) and the potential for freezing.

3) How important is the project to the health of the Public and the citizens of the District and/or service area?

Give a statement of the projects effect on the health of the service area. The design of the project will improve the
overall condition of the facility so as to reduce or eliminate potential for disease, or correct concerns regarding the
environmental health of the area. (Typical examples may include the effects of the completed project by improving
or adding storm drainage or sanitary facilities, etc.). Please be specific and provide documentation if necessary to
substantiate the data. The applicant must demonstrate the type of problems that exist, the frequency and severity of
the problems and the method of correction.

N/A

4) Does the project help meet the infrastructure repair and replacement needs of the applying jurisdiction?

The jurisdiction must submit a listing in priority order of the projects for which it is applying. Points will be awarded on the basis of most to least importance.

Priority 1 Waverly Avenue Improvements

Priority 2 Brooks and Jewett Improvements

Priority 3 Abilene Trail Improvements

Priority 4

Priority 5

5)	To what extent will the user fee funded agency be participating in the funding of the project?
(exa	ample: rates for water or sewer, frontage assessments, etc.).
	No participation - Zero (0)%. Due to the lowering of the roadway, the waterline
wil	l be replaced with roadway funds.
6)	Economic Growth - How will the completed project enhance economic growth
Giv	e a statement of the projects effect on the economic growth of the service area (be specific).
	No significant impact on economic growth
7)	Matching Funds - LOCAL
	information regarding local matching funds is to be filed by the applicant in Section 1.2 (b) of the Ohio Public ks Association's "Application For Financial Assistance" form.
8)	Matching Funds - OTHER
Wor	information regarding local matching funds is to be filed by the applicant in Section 1.2 (c) of the Ohio Public ks Association's "Application For Financial Assistance" form. If MRF funds are being used for matching funds, the F application must have been filed by August 31, 2007 of this year for this project with the Hamilton County ineer's Office. List below all "other" funding the source(s).
	Local funds are used as the match for this project.
	Will the project alleviate serious traffic problems or hazards or respond to the future level of service needs of the district?
Des	scribe how the proposed project will alleviate serious traffic problems or hazards (be specific).
faci	roadway betterment projects, provide the existing and proposed Level of Service (LOS) of the lity using the methodology outlined within AASHTO'S "Geometric Design of Highways and tets" and the 1985 Highway Capacity Manual.
Exi	sting LOS Proposed LOS

If the proposed design year LOS is not "C" or better, explain	n why LOS "C" c	annot be achie	ved.
10) If SCIP/LTIP funds were granted, when would the country of the search of the searc	r receiving the e deadline for a tus reports of p	Project Agrapplications)	reement from OPWC would the project be
Number of months2	duio.		
a.) Are preliminary plans or engineering completed?	Yes X	No	N/A
b.) Are detailed construction plans completed?	Yes	No X	N/A
c.) Are all utility coordination's completed?	Yes	No X	N/A
d.) Are all right-of-way and easements acquired (if applicable))? Yes	No	N/A X
If no, how many parcels needed for project? For any parcels not yet acquired, explain the status o		Ten Per	nporary
e.) Give an estimate of time needed to complete any item above11) Does the infrastructure have regional impact?	ve not yet complet	ed6	Months.
Give a brief statement concerning the regional significance of The project will primarily affect the residen		•	* *
 12) What is the overall economic health of the jurisdiction The District 2 Integrating Committee predetermines the jurisdiction may periodically be adjusted when census and oth 13) Has any formal action by a federal, state, or local go of the usage or expansion of the usage for the involved Describe what formal action has been taken which resulted infrastructure? Typical examples include weight limits, issuance of building permits, etc. The ban must have been considered valid. Submission of a copy of the approved legit No ban 	risdiction's econo ner budgetary data evernment agency in frastructure? in a ban of the use truck restriction en caused by a s station would be	are updated. y resulted in a e of or expansion is, and morate tructural or open	partial or complete ban on of use for the involved oriums or limitations on
Will the ban be removed after the project is comple			N/A X

14)	What is th	e total	number	of	existing	daily	users	that	will	benefit	as	a	result	of	the
	proposed pr	roject?													

For roads and bridges, multiply current Average Daily Traffic (ADT) by 1.20. For inclusion of public transit, submit documentation substantiating the count. Where the facility currently has any restrictions or is partially closed, use documented traffic counts prior to the restriction. For storm sewers, sanitary sewers, water lines, and other related facilities, multiply the number of households in the service area by 4. User information must be documented and certified by a professional engineer or the jurisdictions' C.E.O.

ADT <u>700</u> X 1.20 = <u>840</u> Users

Traffic:

Water/Sewer: Homes	X 4.00 =	Users
	tion enacted the optional \$5 leated tax for the pertinent infi	license plate fee, an infrastructure levy, a rastructure?
The applying jurisdiction sha applied for. (Check all that a	all list what type of fees, levies or taxes tapply)	hey have dedicated toward the type of infrastructure being
Optional \$5.00 License Tax _	yes	
Infrastructure Levy	Specify type	
Facility Users Fee	Specify type	
Other Fee, Levy or Tax Bon	d for Roadway Improvements Specify	type Specifically includes Waverly Avenue

SCIP/LTIP PROGRAM ROUND 22 - PROGRAM YEAR 2008 PROJECT SELECTION CRITERIA JULY 1, 2008 TO JUNE 30, 2009

NAME OF APPLICANT: _	City of	Wyoming	
NAME OF PROJECT:	Waverly	Aue. Improvements	
RATING TEAM: 5	_		

General Statement for Rating Criteria

Points awarded for all items will be based on engineering experience, field verification, application information and other information supplied by the applying agency, which is deemed to be relevant by the Support Staff. The examples listed in this addendum are not a complete list, but only a small sampling of situations that may be relevant to a given project.

Appeal Score

CIRCLE THE APPROPRIATE RATING

What is the physical condition of the existing infrastructure that is to be replaced or repaired?

25 - Failed

1)

23 - Critical

20 - Very Poor

(17)- Poor

15 - Moderately Poor

10 - Moderately Fair

5 - Fair Condition

0 - Good or Better

Criterion 1 - Condition

Condition of the particular infrastructure to be repaired, reconstructed or replaced shall be a measure of the degree of reduction in condition from its original state. Historic pavement management data based on ASTM D6433-99 rating system may be submitted as documentation. Capacity, serviceability, safety and health shall not be considered in this criterion. Any documentation the Applicant wishes to be considered must be included in the application package.

Definitions:

Failed Condition - requires complete reconstruction where no part of the existing facility is salvageable. (E.g. Roads: complete reconstruction of roadway, curbs and base; Bridges: complete removal and replacement of bridge; Underground: removal and replacement of an underground drainage or water system.

Critical Condition - requires partial reconstruction to maintain integrity. (E.g. Roads: reconstruction of roadway/curbs can be saved; Bridges: removal and replacement of bridge with abutment modification; Underground: removal and replacement of part of an underground drainage or water system.

<u>Very Poor Condition</u> - requires extensive rehabilitation to maintain integrity. (E.g. Roads: extensive full depth, partial depth and curb repair of a roadway with a structural overlay; Bridges: superstructure replacement; Underground: repair of joints and/or replacement of pipe sections.

<u>Poor Condition</u> - requires standard rehabilitation to maintain integrity. (E.g. Roads: moderate full depth, partial depth and curb repair to a roadway with no structural overlay needed or structural overlay with minor repairs to a roadway needed; Bridges: extensive patching of substructure and replacement of deck; Underground: insituform or other in ground repairs.

Moderately Poor Condition - requires minor rehabilitation to maintain integrity. (E.g. Roads: minor full depth, partial depth or curb repairs to a roadway with either a thin overlay or no overlay needed; Bridges: major structural patching and/or major deck repair.

Moderately Fair Condition - requires extensive maintenance to maintain integrity. (E.g. Roads: thin or no overlay with extensive crack sealing, minor partial depth and/or slurry or rejuvenation; Bridges: minor structural patching, deck repair, erosion control.)

Fair Condition - requires routine maintenance to maintain integrity. (E.g. Roads: slurry seal, rejuvenation or routine crack sealing to the roadway; Bridges: minor structural patching.)

Good or Better Condition - little to no maintenance required to maintain integrity.

Note: If the infrastructure is in "good" or better condition, it will NOT be considered for SCIP/LTIP funding unless it is an expansion project that will improve serviceability.

-1-	
How important is the project to the safety of the Public and the citizens of	the District and/or service area?
25 - Highly significant importance 20 - Considerably significant importance 15 - Moderate importance 10 - Minimal importance 5 - Poorly documented importance 0 - No measurable impact	Noter has upgade interessed hydroids
Criterion 2 – Safety The applying agency shall include in its application the type frequency; and sexists and how the intended project would improve the situation. For examp the problems cited? Have they involved injuries or fatalities? In the case of the case of water lines, is the present capacity inadequate to provide volumes specific documentation is required. Mentioned problems, which are poorly 5 points.	ole, have there been vehicular accidents attributable to water systems, are existing hydrants non-functional? In or pressure for adequate fire protection? In all cases.
Note: Each project is looked at on an individual basis to determine if any a are NOT intended to be exclusive.	spects of this category apply. Examples given above
How important is the project to the <u>health</u> of the Public and the citizens of t	the District and/or service area?
25 - Highly significant importance 20 - Considerably significant importance 15 - Moderate importance 10 - Minimal importance 5 - Poorly documented importance O No measurable impact	Appeal Score
Criterion 3 – Health The applying agency shall include in its application the type, frequency, and se or reduced by the intended project. For example, can the problem be eliminated satisfactory? If basement flooding has occurred, was it storm water or sanitary case of underground improvements, how will they improve health if they are simprove health or reduce health risk? In all cases, quantified documentation documented, shall generally will not receive more than 5 points.	d only by the project, or would routine maintenance be y flow? What complaints if any are recorded? In the storm sewers? How would improved sanitary sewers
	25 - Highly significant importance 20 - Considerably significant importance 15 - Moderate importance 10 - Minimal importance 5 - Poorly documented importance 6 - No measurable impact Criterion 2 - Safety The applying agency shall include in its application the type frequency, and exists and how the intended project would improve the situation. For example, the problems cited? Have they involved injuries or fatalities? In the case of the case of water lines, is the present capacity inadequate to provide volumes specific documentation is required. Mentioned problems, which are poorly 5 points. Nate: Each project is looked at on an individual basis to determine if any a are NOT intended to be exclusive. How important is the project to the health of the Public and the citizens of 25 - Highly significant importance 20 - Considerably significant importance 15 - Moderate importance 5 - Poorly documented importance 5 - Poorly documented importance Criterion 3 - Health The applying agency shall include in its application the type, frequency, and so or reduced by the intended project. For example, can the problem be eliminated satisfactory? If basement flooding has occurred, was it storm water or sanitary case of underground improvements, how will they improve health if they are improve health or reduce health risk? In all cases, quantified documentation improvements and the case of underground improvements.

Note: Applying agency's priority listing (part of the Additional Support Information) must be filed with application(s).

25 - First priority project	Appeal Score
20 - Second priority project	• •
15 -Third priority project	
10 - Fourth priority project	
5 - Fifth priority project or lower	

Criterion 4 - Jurisdiction's Priority Listing

The applying agency must submit a listing in priority order of the projects for which it is applying. Points will be awarded on the basis of most to least importance. The form is included in the Additional Support Information.

To what extent will a user fee funded agency be parti	cipating in the funding of the project?
(0 - Less than 10%)	
9 – 10% to 19.99%	
8 – 20% to 29.99%	Appeal Score
7 – 30% to 39.99%	
6 – 40% to 49.99%	
5 – 50% to 59.99%	
4 – 60% to 69.99%	
3 – 70% to 79.99%	
2 – 80% to 89.99%	
1 – 90% to 95%	
0 – Above 95%	

Criterion 5 - User Fee-funded Agency Participation

To what extent will a user fee funded agency be participating in the funding of the project? (Example: rates for water or sewer, frontage assessments, etc.). The applying agency must submit documentation.

6) Economic Growth – How the completed project will enhance economic growth (See definitions).

10 – The project will <u>directly</u> secure new employment	Appeal Score
5 – The project will permit more development	
0-The project will not impact development	

Criterion 6 - Economic Growth

Will the completed project enhance economic growth and/or development in the service area?

Definitions:

5)

Secure new employment: The project as designed will secure development/employers, which will immediately add new permanent employees to the jurisdiction. The applying agency must submit details.

Permit more development: The project as designed will permit additional business development/employment. The applying agency must supply details.

The project will not impact development: The project will have no impact on business development.

Note: Each project is looked at on an individual basis to determine if any aspects of this category apply.

Matching Funds - LOCAL

10 - This project is a loan or credit enhancement

10 - 50% or higher 8 - 40% to 49.99% 6 - 30% to 39.99% 4 - 20% to 29.99% 2 - 10% to 19.99% 0 - Less than 10%

List total percentage of "Local" funds 50 %

Criterion 7 - Matching Funds - Local

The percentage of matching funds which come directly from the budget of the applying agency. Ten points shall be awarded if a loan request is at least 50% of the total project cost. (If the applying agency is not a user fee funded agency, any funds to be provided by a user fee generating agency will be considered "Matching Funds — Other").

10 – 50% or higher	List below each funding sou	rce and percentag
8 – 40% to 49.99%	<u> </u>	%
6 – 30% to 39.99%		%
4 – 20% to 29.99%		%
2 – 10% to 19.99%		%
1 - 1% to 9.99%		%

Criterion 8 - Matching Funds - Other

Matching Funds - OTHER

The percentage of matching funds that come from funding sources other than those mentioned in Criterion 7. A letter from the outside funding agency stating their financial participation in the project and the amount of funding is required to receive points. For MRF, a copy of the current application form filed with the Hamilton County Engineer's Office meets the requirement.

List total percentage of "Other" funds ____()

Will the project alleviate serious capacity problems or hazards or respond to the future level of service needs of the district?

10 - Project design is for future demand.	Appeal Score
8 - Project design is for partial future demand.	
6 - Project design is for current demand.	
4 - Project design is for minimal increase in capacity.	
2 - Project design is for no increase in capacity.	

Criterion 9 – Alleviate Capacity Problems

The applying agency shall provide a narrative, along with pertinent support documentation, which describe the existing deficiencies and showing how congestion will be reduced or eliminated and how service will be improved to meet the needs of any expected growth or development. A formal capacity analysis accompanying the application would be beneficial. Projected traffic or demand should be calculated as follows:

Formula:

Existing users x design year factor = projected users

Design Year	Design year	· factor	
	Urban	Suburban	Rural
20	1.40	1.70	1.60
10	1.20	1.35	1.30

Definitions:

<u>Future demand</u> – Project will eliminate existing congestion or deficiencies and will provide sufficient capacity or service for twenty-year projected demand or fully developed area conditions. Justification must be supplied if the area is already largely developed or undevelopable and thus the projection factors used deviate from the above table.

<u>Partial future demand</u> – Project will eliminate existing congestion or deficiencies and will provide sufficient capacity or service for ten-year projected demand or partially developed area conditions. Justification must be supplied if the area is already largely developed or undevelopable and thus the projection factors used deviate from the above table.

<u>Current demand</u> – Project will eliminate existing congestion or deficiencies and will provide sufficient capacity or service only for existing demand and conditions.

Minimal increase – Project will reduce but not eliminate existing congestion or deficiencies and will provide a minimal but less than sufficient increase in existing capacity or service for existing demand and conditions.

<u>No increase</u> – Project will have no effect on existing congestion or deficiencies and provide no increase in capacity or service for existing demand and conditions.

10) Readiness to Proceed - If SCIP/LTIP funds are granted, when would the construction contract be awarded?

5 - Will be under contract by December 31, 2008 and no delinquent projects in Rounds 19 & 20 - Will be under contract by March 31, 2009 and/or one delinquent project in Rounds 19 & 20

0 - Will not be under contract by March 31, 2009 and/or more than one delinquent project in Rounds 19 & 20

Criterion 10 - Readiness to Proceed

The Support Staff will assign points based on engineering experience and status of design plans. A project is considered delinquent when it has not received a notice to proceed within the time stated on the original application and no time extension has been granted by the OPWC. An applying agency receiving approval for a project and subsequently canceling the same after the bid date on the application will receive zero (0) points under this round and the following round.

11) Does the infrastructure have regional impact? Consider origination and destination of traffic, functional classifications, size of service area, and number of jurisdictions served, etc.

10 - Major Impact

Appeal Score 8 - Significant Impact

6 - Moderate Impact

4 - Minor Impact

2 - Minimal or No Impact

Criterion 11 - Regional Impact

The regional significance of the infrastructure that is being repaired or replaced.

Definitions:

Major Impact - Roads: Major Arterial: A direct connector to an Interstate Highway; Arterials are intended to provide a greater degree of mobility rather than land access. Arterials generally convey large traffic volumes for distances greater than one mile. A major arterial is a highway that is of regional importance and is intended to serve beyond the county. It may connect urban centers with one another and/or with outlying communities and employment or shopping centers. A major arterial is intended primarily to serve through traffic.

Significant Impact - Roads: Minor Arterial: A roadway, also serving through traffic, that is similar in function to a major arterial, but operates with lower traffic volumes, serves trips of shorter distances (but still greater than one mile), and may provide a higher degree of property access than do major arterials.

Moderate Impact - Roads: Major Collector: A roadway that provides for traffic movement between local roads/streets and arterials or community-wide activity centers and carries moderate traffic volumes over moderate distances (generally less than one mile). Major collectors may also provide direct access to abutting properties, such as regional shopping centers, large industrial parks, major subdivisions and community-wide recreational facilities, but typically not individual residences. Most major collectors are also county roads and are therefore through streets.

Minor Impact - Roads: Minor Collector: A roadway similar in functions to a major collector but which carries lower traffic volumes over shorter distances and has a higher degree of property access. Minor collectors may serve as main circulation streets within large, residential neighborhoods. Most minor collectors are also township roads and streets and may, or may not, be through streets.

Minimal or No Impact - Roads: Local: A roadway that is primarily intended to provide access to abutting properties. It tends to accommodate lower traffic volumes, serves short trips (generally within neighborhoods), and provides connections preferably only to collector streets rather than arterials.

	Criterion 12 – Economic Health The District 2 Integrating Committee predetermines the applying agency's economic health. The may periodically be adjusted when census and other budgetary data are updated.	economic health of a jurisdiction
	Has any formal action by a federal, state, or local government agency resulted in a partial o expansion of the usage for the involved infrastructure?	r complete ban of the usage or
	10 - Complete ban, facility closed 8 - 80% reduction in legal load or 4-wheeled vehicles only 7 - Moratorium on future development, not functioning for current demand 6 - 60% reduction in legal load 5 - Moratorium on future development, functioning for current demand 4 - 40% reduction in legal load 2 - 20% reduction in legal load	Appeal Score
	0 - Less than 20% reduction in legal load	
	Criterion 13 - Ban The applying agency shall provide documentation to show that a facility ban or moratorium has moratorium must have been caused by a structural or operational problem. Points will only be a project will cause the ban to be lifted.	warded if the end result of the
	The applying agency shall provide documentation to show that a facility ban or moratorium has moratorium must have been caused by a structural or operational problem. Points will only be a	warded if the end result of the
(The applying agency shall provide documentation to show that a facility ban or moratorium has moratorium must have been caused by a structural or operational problem. Points will only be a project will cause the ban to be lifted. What is the total number of existing daily users that will benefit as a result of the proposed property of the	warded if the end result of the project? Appeal Score plying agency's C.E.O must cerolds served, when converted the property of the project
(The applying agency shall provide documentation to show that a facility ban or moratorium has moratorium must have been caused by a structural or operational problem. Points will only be a project will cause the ban to be lifted. What is the total number of existing daily users that will benefit as a result of the proposed properties of the properties	oroject? Appeal Score oplying agency's C.E.O must cerolds served, when converted to but only when certifiable riders

12)

10 Points 8 Points

6 Points

What is the overall economic health of the jurisdiction?